

Remarks

I. Status of claims

Claims 1-20 are pending.

The Examiner has indicated that claims 4-11, 13-14, 16, and 19-20 would be allowable if rewritten in independent form.

II. Claim rejections under 35 U.S.C. § 102

The Examiner has rejected claims 1-3, 12, 15, 17, and 18 under 35 U.S.C. § 102(b) over Mikoshiba (U.S. 6,085,048).

A. Independent claim 1

Independent claim 1 recites:

Claim 1 (original): A device, comprising:

a sleep recovery circuit operable to transition from a first signal detection mode to a second signal detection mode in response to detection of a first signal characteristic in an input signal, and to transition from the second signal detection mode to a third operational mode in response to detection in the input signal of a second signal characteristic different from the first signal characteristic.

In support of the rejection of claim 1, the Examiner has stated that:

... Mikoshiba teaches a device [camera of Fig. 1], comprising: a sleep recovery circuit operable to transition from a first signal detection mode [reference level 3, see col. 29, line 25] to a second signal detection mode [reference level 2, see col. 29, line 20] in response to detection of a first signal characteristic in an input signal [col. 9, lines 41-49], and to transition from the second signal detection mode to a third operational mode [reference level 1, see col. 29, line 17] in response to detection in the input signal of a second signal characteristic different from the first signal characteristic [col. 9, lines 41-49].

Mikoshiba's camera does not operate in the manner described by the Examiner in support of the rejection of claim 1. In particular, contrary to the Examiner's statement,

Mikoshiba's camera does not transition from a first signal detection mode to a second signal detection mode in response to detection of a first signal characteristic in an input signal, nor does Mikoshiba's camera transition from the second signal detection mode to a third operational mode in response to detection in the input signal of a second signal characteristic different from the first signal characteristic.

1. Summary of the sections of Mikoshiba's disclosure relied on by the Examiner

In support of the rejection of claim 1, the Examiner has relied on Mikoshiba's disclosure in col. 9, lines 41-49, and col. 29, lines 17-25.

In col. 9, lines 41-49, Mikoshiba discloses that the camera includes a power source condition detection means that detects the consumption condition of the electric power source and outputs switching signals "corresponding to the consumption condition." Mikoshiba also discloses that a display mode switching means switches display modes according to the switching signal from the power source condition detection means. In col. 29, line 3 - col. 30, line 15, Mikoshiba explains that the power source condition detection means is implemented by the CPU 100, which detects the degree of consumption of the power source 101 "from the time of use of the battery after the completion of the electronic flash charging." Based on a comparison of the detected degree of consumption with the reference levels 1-3, the CPU controls the electronic viewfinder section 200 in accordance with the method shown in FIG. 23.

In col. 29, lines 17-25, Mikoshiba discloses the three difference reference levels of the detected voltage and their associated modes of operation of the electronic viewfinder section 200 (see also FIG. 23).

2. Mikoshiba does not disclose transitioning "from a first signal detection mode to a second signal detection mode in response to detection of a first signal characteristic in an input signal in response to detection of a first signal characteristic in an input signal"

The Examiner has taken the position that Mikoshiba discloses transitioning from a first signal detection mode to a second signal detection mode in response to detection of a first signal characteristic in an input signal in response to detection of a first signal characteristic in an input signal. In accordance with this position, the operational mode of the viewfinder section 200 that is triggered by voltage reference level 3 constitutes the first signal detection mode recited in claim 1 and the operational mode of the viewfinder section 200 that

is triggered by the voltage reference 2 constitutes the second signal detection mode recited in claim 1; however, neither of these operational modes of the viewfinder section 200 constitutes a "signal detection mode." Instead, each of these operational modes constitutes an operational state of the viewfinder section 200 of Mikoshiba's camera in which different display functionalities of the viewfinder section 200 have been stopped by the CPU 100 (see col. 29, lines 38-43 and 62-67; also see FIG. 23, blocks S75 and S76). These modes of operation of the viewfinder section 200 have nothing whatsoever with signal detection modes of a sleep recovery circuit, as recited in claim 1.

The Examiner also has taken the position that col. 9, lines 41-49 of Mikoshiba's disclosure teaches that the transitioning from the first signal detection mode and the second signal detection mode is in response to detection of a first signal characteristic in an input signal. In col. 9, lines 41-49, Mikoshiba teaches that the power source condition detection means detects the consumption condition of the electric power source and outputs switching signals "corresponding to the consumption condition" and that the display mode switching means switches display modes according to the switching signal from the power source condition detection means. This disclosure, however, does not teach how the power source condition detection means detects the consumption condition of the electric power source. In col. 29, lines 8-13, Mikoshiba explains that the CPU 100 detects the degree of consumption of the power source 101 "from the time of use of the battery after the completion of the electronic flash charging." The detection of the time of use of the battery, however, does not constitute the detection of a first signal characteristic in an input signal. Instead, the detection of the time of use involves determining the difference between two different times or some other calculation (see Mikoshiba's use of the word "calculated" in col. 9, line 12).

For at least this reason, the Examiner's rejection of independent claim 1 under 35 U.S.C. § 102(b) over Mikoshiba should be withdrawn.

3. Mikoshiba does not disclose transitioning "from the second signal detection mode to a third operational mode in response to detection in the input signal of a second signal characteristic different from the first signal characteristic"

The Examiner has taken the position that Mikoshiba discloses transitioning from the second signal detection mode to a third operational mode in response to detection in the input signal of a second signal characteristic different from the first signal characteristic. In accordance with this position, the operational mode of the viewfinder section 200 that is triggered by the voltage reference 2 constitutes the second signal detection mode recited in

claim 1; however, this operational mode of the viewfinder section 200 does not constitute a “signal detection mode.” Instead, this operational mode constitutes an operational state of the viewfinder section 200 of Mikoshiba’s camera in which certain display functionalities of the viewfinder section 200 have been stopped by the CPU 100 (see col. 29, lines 38-43; also see FIG. 23, block S75). This mode of operation of the viewfinder section 200 has nothing whatsoever with a signal detection mode of a sleep recovery circuit, as recited in claim 1.

The Examiner also has taken the position that col. 9, lines 41-49 of Mikoshiba’s disclosure teaches that the transitioning from the second signal detection mode to a third operational mode is in response to detection of a second signal characteristic in an input signal different from the first signal characteristic. As explained in the preceding section of this Response, col. 9, lines 41-49, teaches that the power source condition detection means detects the consumption condition of the electric power source and outputs switching signals “corresponding to the consumption condition” and that the display mode switching means switches display modes according to the switching signal from the power source condition detection means. Although this disclosure does not teach how the power source condition detection means detects the consumption condition of the electric power source Mikoshiba explains in col. 29, lines 8-13, that the CPU 100 detects the degree of consumption of the power source 101 “from the time of use of the battery after the completion of the electronic flash charging.” The detection of the time of use of the battery, however, does not constitute the detection of a second signal characteristic in an input signal. Instead, the detection of the time of use involves determining the difference between two different times or some other calculation (see Mikoshiba’s use of the word “calculated” in col. 9, line 12).

Furthermore, whatever signal characteristic of the “input signal” that is used by the CPU 100 to detect the time of use will be the same regardless of which reference voltage level is used as a basis of comparison for setting the operational mode of the viewfinder section 200. Therefore, the transitioning between the first and second operational modes of the viewfinder section 200 and the transitioning between the second and third operational modes of the viewfinder section 200 would be in response to detection of the same (i.e., not different) signal characteristic of such an input signal.

For at least these additional reasons, the Examiner’s rejection of independent claim 1 under 35 U.S.C. § 102(b) over Mikoshiba should be withdrawn.

B. Claims 2, 3, 12, 15, and 17

Each of claims 2, 3, 12, 15, and 17 incorporates the features of independent claim 1 and therefore is patentable over Mikoshiba for at least the same reasons explained above.

Claims 15 and 17 also are patentable over Mikoshiba for the following additional reasons.

Claim 15 recites that “the sleep recovery circuit transmits output data corresponding to data of the input signal during the third mode of operating the device.” The Examiner has stated that Mikoshiba discloses this feature in col. 29, lines 13+. Contrary to the Examiner’s statement, however, there is no part of Mikoshiba’s disclosure that teaches the subject matter defined in claim 15. In accordance with the Examiner’s position expressed in the rejection of claim 1, the CPU 100 constitutes the sleep recovery circuit recited in the claims since it controls the switching between the operational modes of the viewfinder section 200. The Examiner, however, has not identified an element of Mikoshiba’s disclosure that constitutes the “input signal” that is recited in the claims. Nevertheless, it can be inferred from Mikoshiba’s disclosure in col. 29 that, if such an input signal exists, it must convey information from which the CPU 100 calculates the “time of use of the battery after the completion of the electronic flash charging” (col. 29, lines 12-13). Mikoshiba, however, does not teach or suggest anything that would have led one skilled in the art at the time the invention was made to believe that the CPU 100 outputs data corresponding to the data from which the CPU 100 calculates the “time of use of the battery after the completion of the electronic flash charging” (col. 29, lines 12-13). Therefore, there is no basis for the Examiner’s assertion that Mikoshiba discloses the subject matter defined in claim 15. For at least this additional reason, the Examiner’s rejection of claim 15 over Mikoshiba should be withdrawn.

Claim 17 recites that “the input signal is an optical signal.” In the rejection of claim 17, the Examiner has not stated that Mikoshiba discloses that the input signal is an optical signal, nor has the Examiner pointed to any part of Mikoshiba’s disclosure in which Mikoshiba teaches that the input signal is an optical signal. Thus, the Examiner has not established a *prima facie* case of obviousness. Moreover, Mikoshiba does not teach or suggest anything that would have led one skilled in the art at the time the invention was made to believe that an input signal that convey information from which the CPU 100 calculates

the "time of use of the battery after the completion of the electronic flash charging" (col. 29, lines 12-13) is an optical signal. To the contrary, such a person would have understood from Mikoshiba's disclosure that any such input signal (if it exists) would have to be an electronic signal (see, e.g., FIG. 1 and the associated disclosure in the specification). For at least this additional reason, the Examiner's rejection of claim 17 over Mikoshiba should be withdrawn

C. Independent claim 18

Independent claim 18 recites features that essentially track the pertinent features discussed above in connection with independent claim 1 and, therefore, is patentable over Mikoshiba for at least the same reasons explained above.

III. Conclusion

For the reasons explained above, all of the pending claims are now in condition for allowance and should be allowed.

Charge any excess fees or apply any credits to Deposit Account No. 50-3718.

Respectfully submitted,

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